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Conference Abstract

More Data, Better Standards-Still Not Better Decisions? Lessons from ENABLElocal

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Abstract

The urgent call to reverse biodiversity loss has led to unprecedented efforts to improve biodiversity monitoring, databases, harmonize indicator frameworks, and promote open access to data (Lindenmayer et al. 2011). Global initiatives such as the Kunming-Montreal Global Biodiversity Framework (GBF) (Stephens 2023) emphasize the need for robust, interoperable biodiversity data to support evidence-based decision-making across scales. In this context, more data and better technical standards are often seen as key *enablers* of effective biodiversity governance. However, the assumption that increasing data volume and standardization will automatically lead to better decisions does not always hold true (e.g., Porto de Albuquerque et al. 2021)—particularly at the local level, where conservation action actually takes place. Local decision-makers often face practical, institutional, personal and epistemic barriers that limit their ability to access, interpret, or apply available data in ways that support their mandates and contexts. Meanwhile, local knowledge and plural values are rarely integrated into higher-level biodiversity data infrastructures.

ENABLElocal*[1] is a transdisciplinary mixed-method research project working in Czechia, Germany, and Sweden, which explores how biodiversity data is understood, accessed, and used by stakeholders involved in land use and conservation management. It highlights the importance of governance, context, and stakeholder engagement in

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determining whether biodiversity data becomes usable—and ultimately useful—for transformative action on the ground.

The ENABLElocal project aims to bridge the persistent gap between biodiversity data—including monitoring datasets, species records, and environmental variables—and local-scale decision-making in conservation and land use. While large volumes of ecological data are increasingly accessible through national and international infrastructures, their uptake in local governance remains limited (Güntsch et al. 2024). ENABLElocal addresses this across three case studies—Germany, Sweden, and Czechia—each situated in distinct governance systems and biodiversity contexts. At CzechGlobe, the focus is on identifying institutional, social, and technical barriers that hinder effective data use in local decisions. More broadly, the project examines how biodiversity data supply-and-demand align (or not), and how governance conditions shape perceived usability.

The project applies a living lab approach to foster iterative knowledge co-production with stakeholders in local biodiversity governance. Such integration of qualitative social science methods into biodiversity monitoring remains rare but essential for making data meaningful and actionable. The first round of workshops (autumn 2024) mapped stakeholder objectives, decision processes, and data types used or needed—from formal datasets to local knowledge. To examine actual data use in context, 39 semi-structured interviews were conducted (summer 2025) with local actors, exploring barriers to access, use, and relevance. A complementary survey, run across all case studies, identified commonly used datasets, unmet needs, and preferences. All activities followed harmonized protocols; interviews were coded using MaxQDA,*[2] and user stories helped ground data needs in stakeholder perspectives.

Preliminary results point to consistent challenges in using biodiversity data locally. Workshops revealed diverse stakeholder objectives, even within regions—complicating one-size-fits-all tools and reinforcing the need for context-sensitive approaches. Interviews highlight poor communication between data providers and users as a key institutional barrier. Many stakeholders lack spaces to express data needs or feedback on usability. Although analysis is ongoing, findings suggest governance reform may be as critical as technical improvements. Overall, the results underline ENABLElocal's core insight: more data and better standards do not automatically lead to better decisions. Trust, communication, and participatory processes are essential to make biodiversity data actionable.

ENABLElocal shows that the barriers to effective biodiversity data use are often not technical—but social, institutional, and relational. Even as global frameworks promote standardization and open data, local actors struggle to translate datasets into decisions. Addressing this requires more than better tools; it demands better relationships. Our work suggests that communication, co-production, and context-awareness should be treated as core components of biodiversity data infrastructure. Without them, even FAIR (Findability, Accessibility, Interoperability, and Reusability) data may fail to support fair outcomes (Wilkinson et al. 2016). As ENABLElocal continues, upcoming workshops (scheduled for January 2026) and interview analysis will deepen our understanding of

how local governance systems can become active co-creators—not just passive users—of biodiversity knowledge.

Keywords

biodiversity governance, data usability, transdisciplinary research, local decision making, living labs

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Conflicts of interest

The authors have declared that no competing interests exist.

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Endnotes

*1 ISOE, ULUND, CzechGlobe. ENABLElocal project page. ENABLElocal Project Page n.d. https://www.enablelocal.eu/en/.

*2 *MAXQDA* (Verze 2025). (b.r.). [Software]. VERBI Software Germany. maxqda.com